



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/710,390	11/09/2000	HORST GRAFE	DT-3734	5453

30377 7590 06/17/2004

DAVID TOREN, ESQ.
SIDLEY, AUSTIN, BROWN & WOOD, LLP
787 SEVENTH AVENUE
NEW YORK, NY 10019-6018

EXAMINER

DRUAN, THOMAS J

ART UNIT	PAPER NUMBER
----------	--------------

3724

DATE MAILED: 06/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/710,390

Applicant(s)

GRAFE ET AL.

Examiner

Thomas J. Druan, Jr.

Art Unit

3724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 1/16/04 & 3/19/04.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10-12 and 14-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10-12 and 14-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Request for Continued Examination

1. The Request for Continued Examination (RCE) filed on 16 January 2004 under 35 CFR 1.114 is acceptable. An action on the RCE and on Amendments filed 1/16/04 and 3/19/04 follows.

Priority

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.
3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 103

4. Claims 10-12 & 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 2,076,969 to Sieger in view of USPN 5,207,138 to Sato et al.

Sieger discloses the invention substantially as claimed including a shear device for cutting a strip, said shear device comprising a frame 4e, an upper blade assembly 4c (a drum as seen by substantially equal radii along a diameter which includes a upper blade 4a) and a lower blade assembly 4d (a beam bridge as seen by a reduced radius opposite a lower blade 4b), wherein said upper blade assembly and lower blade assembly are permanently rotationally connected via intermeshing gears (p. 1, column 2, lines 48-51) which have

Art Unit: 3724

diameters corresponding roughly to the diameters of respective blades (fig. 1) and would inherently be manufactured so as to be backlash free. The different diameters of the intermeshing gears will produce a different but finite number of rotations of the upper and lower blades through a cutting zone. Roller means 19 is connected to an adjusting means 23 which is synchronized to move the roller to lift a strip before passing of the lower blade and to lower the strip before passing of the upper blade (p. 2, column 2, lines 50-62). The roller means will accomplish this as the upper blade will passing a cutting zone while the roller is lowered (as shown to be slightly after the position in fig. 1) and will be raised while the lower blade is in a cutting zone (during a cutting action).

Sieger discloses an upper blade assembly having a smaller diameter than its lower blade assembly, though it would have been obvious to one skilled in the art at the time of the invention to switch the position of the upper blade assembly with the lower blade assembly since simple reversal of parts is old and well known in the art that, and having a smaller diameter lower cutting assembly would allow more room for the strip to be directed under table 3.

Sieger does not disclose an upper blade drum and lower blade drum as claimed; however, it would have been obvious to one skilled in the art at the time of the invention to provide the combination of an upper blade drum and lower blade drum or the combination of an upper beam bridge and lower blade drum since these combinations are art recognized equivalents for the purpose of shearing a strip material passing therebetween. Sato et al. discloses an example of an upper blade drum 53 and lower blade drum 54.

Art Unit: 3724

Sieger does not disclose two pinch-roller sets in front of and behind the upper and lower blade assemblies; however, it is old and well known in the arts to provide a shearing device with upstream and downstream pinch rollers in order to tension the strip being cut by cooperating cutting devices since tensioning a web facilitates cutting. Sato et al. discloses an example of these pinch rollers 89.

5. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sieger in view of Sato et al. in further view of USPN 3,037,396 to Martin. The combination of Sieger in view of Sato et al. discloses the invention substantially as claimed, but lacks the specific means to minimize backlash. Martin teaches providing a lower blade drum 4 with two gear portions 29/30 axially divided with the two gear portions secured together with a bolt 37 so as to angularly position the gear portion with respect to one another, thereby preventing backlash (column 3, lines 16-23). Therefore, it would have been obvious to use the gear portions of Martin in the shear device of Sieger in view of Sato et al. in order to prevent backlash.

Response to Arguments

6. Applicant's arguments filed 1/16/04 have been fully considered but they are not persuasive. Applicant contends that Sieger does not disclose a roller means that cooperates with one of hydraulic, mechanical, driving and adjusting means an operation of which is synchronized with passing of a respective one of

Art Unit: 3724

the second lower and first upper blades through the blade gap between the first upper and second lower drums.

Applicant's arguments are not persuasive. The invention of Sieger deals with a shearing apparatus for transversely cutting strip material while in motion with roller means 19 connected to an adjusting means 23 which is synchronized to move the roller to lift a strip before passing of the lower blade and to lower the strip before passing of the upper blade (p. 2, column 2, lines 50-62). The roller means will accomplish this as the upper blade will passing a cutting zone while the roller is lowered (as shown to be slightly after the position in fig. 1) and will be raised while the lower blade is in a cutting zone (during a cutting action).

Applicant has not argued why the above is in contention, but merely states that Sieger does not disclose the claim limitations of the now canceled claim 13 which have been put into claims 10, 16 and 17. Therefore, the Examiner believes that the rejection continues to be proper.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas J. Druan, Jr. whose telephone number is 703-308-4200. The examiner can normally be reached on M-F (8:30-6:00) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Allan N. Shoap can be reached on 703-308-1082. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3724

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

2409
tjd

June 14, 2004



Allan N. Shoap
Supervisory Patent Examiner
Group 3700